California MLTS E9-1-1 Deployment Description

The California E9-1-1 system is capable of handling any level of Multi-Line Telephone System (MLTS) deployment to accommodate the liability needs of the responsible MLTS entity. The California E9-1-1 system continues to operate with the legacy ILECs PS/ALI service and is also deployed with the newer VoIP method with all the Voice Positioning Centers per NENAi2 standards. Both provisioning/network options are available for the responsible MLTS entity to consider.

MLTS entities with unified communications operating in multiple states or jurisdictions, may use NENAi2 call routing so the 9-1-1 calls can be routed anywhere in the nation to the appropriate public safety answering point (PSAP). Localized entities may choose either the legacy PS/ALI or NENAi2 routing. The MLTS owner is responsible for the proper education and use of their system.

For questions specific to the MLTS, e-mail Donna Pena at donna.pena@caloes.ca.gov or contact her at (916) 894-5032.

CA MLTS E9-1-1 Testing

- There is not a one size fits all provisioning and test plan for MLTS, as it depends on the configuration, technology, and responsible entity. It is important to have a test plan _before_ calling the local agency and know how many test calls need to be made. Some agencies request up to two weeks advance notice, so it does not impact their operations.
- MLTS tests should confirm the routing to the correct PSAP, especially in a distributed multi-city or multi-county system as well as the address on their display. For meeting FCC location accuracy, also ensure correct floor or unique space.
- There is a 9-1-1 Coordinator in every county to arrange testing with the appropriate PSAP; however, some PSAPs have indicated that they can be contacted directly. It is not recommended to "cold call" PSAPs. The 9-1-1 County Coordinator List contacts is available from the CA 9-1-1 Branch Home page https://www.caloes.ca.gov/911.

CA MLTS E9-1-1 Provisioning for the Standard Automatic Location Information (ALI) LI Display

- MLTS systems can be provisioned to have additional 20 characters of supplemental information for the PSAP ALI display regarding detailed location of the phone stations. Provisioning of more complex campuses, stadiums, and multi-story buildings should be well planned. Basic granularity of BLDG and FL and other useful data for the emergency responders to find the caller can be provisioned.

Element	Abbreviation
Building	BLDG
Floor	FL
Basement	BSMT
Apartment	APT
Suite	STE
Space	SP
Tower	TWR
Front	FR
Elevator	ELEV
Unit	UN
Dock	DOCK
Slip	SLIP

- The standard ALI display for California PSAPs is Format 04 which allows up to 20 characters in the supplemental data field of line 8 for describing additional location elements such as building, floor, unit, space, or other defining detail for first responders. The Class of Services are different between deployment options. Legacy deployments will show CNTX, PBXr, or PBXb; whereas, the NENAi2 deployments will show VOIP and use 211 pANIs.
- The PSAP NENAi2 ALI Display showing MLTS information is on the next page circled in green. The diagram shows supplemental MLTS information in line 8 using 20 characters and recommends MIL-STD-12D for abbreviations, such as at the right.

CA MLTS E9-1-1 Data Maintenance

- It is the MLTS owner's responsibility for maintaining station location information. If there has been a transition to using the new VoIP deployment, _the old records shall be removed from the legacy ILEC PS/ALI accounts._

FCC new MLTS E9-1-1 rules, per 47 CFR Part 9 (as of December 2019)

- Kari's Law enables users to call 9-1-1 directly, without a prefix "9" to reach an outside line. www.fcc.gov/mlts-911-requirements
- New "dispatchable location" requirements, from RAY BAUM's Act, are needed in addition to a valid address, such as floor, suite, room, to identify a caller's location for emergency responders. www.fcc.gov/911-dispatchable-location

California Public Utilities Commission PBX9-1-1 Logo and Advisory Brochure

- https://www.caloes.ca.gov/PublicSafetyCommunicationsSite/Documents/PBX911AdvisoryBrochure.pdf
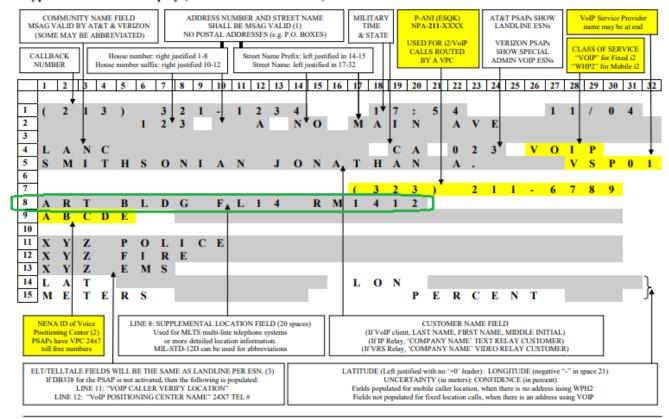
California Public Utilities Commission MLTS E9-1-1 Information

- CPUC MLTS E911 Requirements for Service Providers http://www.cpuc.ca.gov/General.aspx?id=3746

This handout information pertains to standardized MLTS E9-1-1 deployment guidelines utilizing the California E9-1-1 system. A specific company solution cannot be recommended that would present an unfair advantage.

State of California – NENA i2/VoIP E9-1-1 Deployment
Typical i2 VoIP ALI Display (E-PAM from Format 04)

COMMUNITY NAME FIELD — MSAG VALID BY AT&T & VERIZON (SOME MAY BE ABBREVIATED)

ADDRESS NUMBER AND STREET NAME — SHALL BE MSAG VALID (1) — NO POSTAL ADDRESSES (e.g. P.O. BOXES)

MILITARY TIME & STATE

P-ANI (ESQK) — NPA-211-XXXX — USED FOR i2/VoIP CALLS ROUTED BY A VPC

AT&T PSAPs SHOW LANDLINE ESNs — VERIZON PSAPs SHOW SPECIAL ADMIN VOIP ESNs

VoIP Service Provider name may be at end

CALLBACK NUMBER

House number: right justified 1-8
House number suffix: right justified 10-12

Street Name Prefix: left justified in 14-15
Street Name: left justified in 17-32

CLASS OF SERVICE — "VOIP" for Fixed i2 — "WHP2" for Mobile i2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	(	2	1	3	)			3	2	1	-	1	2	3	4			1	7	:	5	4				1	1	/	0	4		
2			1	2	3				A		N	O		M	A	I	N			A	V	E										
3																																
4	L	A	N	C										C	A		0	2	3			V	O	I	P							
5	S	M	I	T	H	S	O	N	I	A	N		J	O	N	A	T	H	A	N		A	.				V	S	P	0	1	
6																																
7																	(	3	2	3	)		2	1	1	-	6	7	8	9		
8	A	R	T		B	L	D	G		F	L	1	4		R	M	1	4	1	2												
9	A	B	C	D	E																											
10																																
11	X	Y	Z		P	O	L	I	C	E																						
12	X	Y	Z		F	I	R	E																								
13	X	Y	Z		E	M	S																									
14	L	A	T											L	O	N																
15	M	E	T		E	R	S										P	E	R	C	E	N	T									

NENA ID of Voice Positioning Center (2) — PSAPs have VPC 24x7 toll free numbers

LINE 8: SUPPLEMENTAL LOCATION FIELD (20 spaces) — Used for MLTS multi-line telephone systems or more detailed location information. MIL-STD-12D can be used for abbreviations.

CUSTOMER NAME FIELD — (If VoIP client, LAST NAME, FIRST NAME, MIDDLE INITIAL) — (If IP Relay, 'COMPANY NAME' TEXT RELAY CUSTOMER) — (If VRS Relay, 'COMPANY NAME' VIDEO RELAY CUSTOMER)

ELT/TELLTALE FIELDS WILL BE THE SAME AS LANDLINE PER ESN. (3) — If DB338 for the PSAP is not activated, then the following is populated: LINE 11: "VOIP CALLER VERIFY LOCATION" — LINE 12: "VoIP POSITIONING CENTER NAME" 24X7 TEL #

LATITUDE (Left justified with no '+0' leader): LONGITUDE (negative "-" in space 21) — UNCERTAINTY (in meters): CONFIDENCE (in percent) — Fields populated for mobile caller location, when there is no address using WPH2 — Fields not populated for fixed location calls, when there is an address using VOIP

Additional References

- FCC MLTS 9-1-1 Requirements https://www.fcc.gov/mlts-911-requirements
  47 C.F.R Part 9, Subpart D: Interconnected VoIP – 47 C.F.R. §§ 9.11, 9.12
  https://www.ecfr.gov/cgi-bin/text-idx?SID=da42b90e56eeab489e8bf014de17090b&mc=true&node=sp47.1.9.d&rgn=div6
  47 C.F.R Part 9, Subpart F: MLTS – 47 C.F.R. §§ 9.15, 9.16, 9.17
  https://www.ecfr.gov/cgi-bin/text-idx?SID=da42b90e56eeab489e8bf014de17090b&mc=true&node=sp47.1.9.f&rgn=div6

- FCC MLTS Small Entity Compliance Guide https://docs.fcc.gov/public/attachments/DA-20-431A1.pdf

- FCC Docket 18-261, NPRM to Amend Title 47, Chapter I, Part 9 (Notice September 5, 2018)
  § 9.16 General Obligations – direct 911 dialing, notification and dispatchable location
  https://docs.fcc.gov/public/attachments/DOC-353961A1.pdf

- The California E9-1-1 Network Call Types diagram and VoIP E9-1-1 i2 ALI Display Links
  http://www.caloes.ca.gov/PublicSafetyCommunicationsSite/Documents/CA911NetworkCallTypescomparison.pdf
  http://www.caloes.ca.gov/PublicSafetyCommunicationsSite/Documents/CAVoIPE9-1-1i2ALIDisplay.pdf

- 9-1-1 phone stickers are available from the CalOES 9-1-1 Branch, please use the following form on-line
  http://www.caloes.ca.gov/PublicSafetyCommunicationsSite/Documents/DECALREQUEST.pdf

- FCC VoIP Specific Consumer information http://transition.fcc.gov/cgb/consumerfacts/voip.pdf

- Kari's Law Act of 2017, Federal H.R 582 Jan. 23, 2017 defines direct dialing requirements for (a) manufactures, (b) installations, and (c) on-site notifications.
  https://www.congress.gov/crec/2017/01/23/CREC-2017-01-23-pt1-PgH588.pdf

MLTS E911 CALIFORNIA